



The Power of Data

Bureau of Emergency and Trauma Services
(BETS)

Objectives

- Understanding the components of good data.
- Recognize impacts of timeliness on data.
- Identify examples of available data sources.
- Identify available data reports and mechanisms for report data.

What makes Data “Good”?

- o Accuracy
- o Completeness
- o Consistency
- o Context
- o Timeliness



Data Accuracy

o Accurate

o Merriam-Webster Dictionary: “free from error especially as the result of care; conforming exactly to truth or a standard.”

o Accurate data requires consistent abstraction from charts.

o ICD10 codes



o Inaccurate

o Data entry issues & inconsistencies reported data and medical record



Data Completeness

o Completeness

- o Full responses
- o High validation scores
- o NTDB wrench



o Opportunity in incomplete data...

- o If not recorded, not reported. Don't make up information for the registry...it must come from a verifiable record.
- o Conduct Performance Improvement (PI) if data is consistently missing from records.



Consistency in Data

o Consistent

- o Logical for a patient
- o Reported in the same manner regardless of institution or individual reporting
- o Reported based on element definition



o Inconsistent

- o 80 year old patient with a pediatric Glasgow Coma Scale



Context of Data

o Context

- o “The circumstances that form the setting for an event, statement, or idea, and in terms of which it can be fully understood and assessed.” Merriam-Webster Dictionary

o Out of Context

- o Date of Birth: 4/19/2016
- o Age: 1
- o Age Unit: Year



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Random Factoid

- o “You eat like a bird.” Commonly meaning you don’t eat much...
- o Data shows:
 - o Birds eat 30-100% of their body weight in food every day.
 - o An average human weighs 150 lbs. Daily food intake for a average human that “eats like a bird” would be 45-150 lbs. of food per day.

Timeliness

- o **Timeliness impacts data quality**
 - o Loss of detail with time
 - o Difficult to make improvements after long periods of time from the incident
 - o Trend analysis vs. Performance Improvement

Data Sources

- o Center for Disease Control and Prevention
 - o WISQARS (Web-based Injury Statistics Query and Reporting System)
<http://www.cdc.gov/injury/wisqars/>
 - o Fatal Injury Data
 - o Nonfatal Injury Data
 - o Violent Deaths
 - o Cost of Injury Reports
 - o Fatal Injury Mapping

Data Sources

- o National Trauma Data Bank

<https://www.facs.org/quality%20programs/trauma/ntdb>

- o Burden of Injury Report

https://idph.iowa.gov/Portals/1/Files/InjuryViolence/burden_of_injury_full_report.pdf

- o Annual Trauma and EMS Reports

<http://idph.iowa.gov/BETS/Trauma/data-registry>

- o IDPH EMS data registry

<https://www.imagetrendelite.com/Elite/?organizationId=iowa>

- o IDPH Trauma Registry

<https://patientregistry.imagetrend.com/iowa/default.cfm?page=login>

Random Factoid

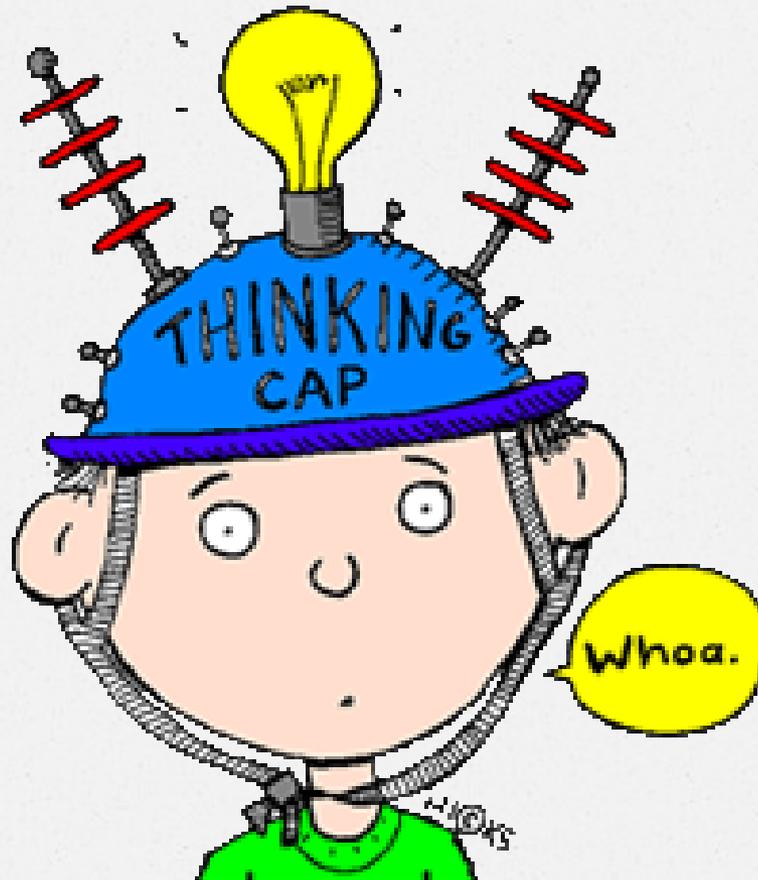
- o Bloodletting was common practice for thousands of years.
- o Evidence-based scrutiny showed it was detrimental to human survival.



Fundamental Data Requirements

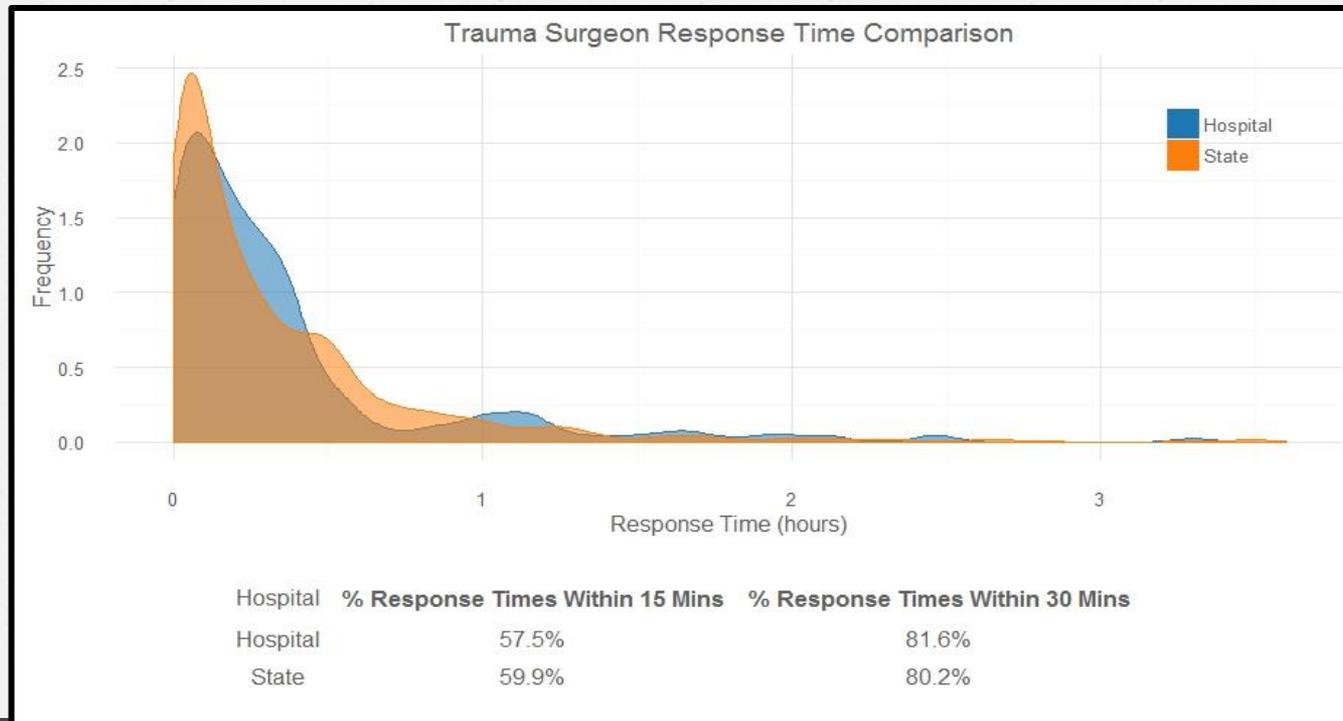
- o ED/Hospital Admission Date
- o Discharge Date
- o Injury fields
- o Data dictionary will specify which fields are required

I have good data...Now What?



Hospital Data compared to State Data

- o What would be useful?
- o Example:



ImageTrend “Canned Reports”

- o Verification reports
- o Prepare for verification visits to avoid surprises

The screenshot displays the ImageTrend Patient Registry interface. At the top, there are navigation tabs: 'Facilities', 'Data Exchange', 'Report Writer', and 'More'. The 'Report Writer' tab is selected, and a red arrow points to it. Below the navigation is the 'IMAGE TREND PATIENT REGISTRY' logo. A blue button labeled 'Create a Report' is prominent. Below this is a 'Load Dashboard' button and a search field. A 'My Reports' section shows a list of folders: 'Ad Hoc Reports (1)', 'All Patients (1)', 'Incident Statistics (3)', 'Test (31)', and 'Verification (3)'. A red arrow points to the 'Verification (3)' folder. To the right, a 'Columns' and 'Display' section shows a list of report categories: 'Consultation', 'Level 1', 'Level 2', 'Non-Trauma', 'Not Activated', 'Not Applicable', 'Not Recorded/Not Known', and 'Re-hospitalization after discharge'.

Custom ImageTrend Reports

- o Create reports
- o Online instructions

Facilities Data Exchange Report Writer More

IMAGE TREND PATIENT REGISTRY

Inbox
User Voice
Help

Create a Report

Load Dashboard »

Search

My Reports + -

- Ad Hoc Reports (1)
- All Patients (1)
- Incident Statistics (3)
- Test (31)

04202016 - LOS Investigation

Admitting Service and Consulting Service Count

Help

Create a Transactional Report
Facility: Facilities, Users
Incident: State Incidents

Create an Analytical Tabular Report
Incident: Regional Analytical, State Analytical

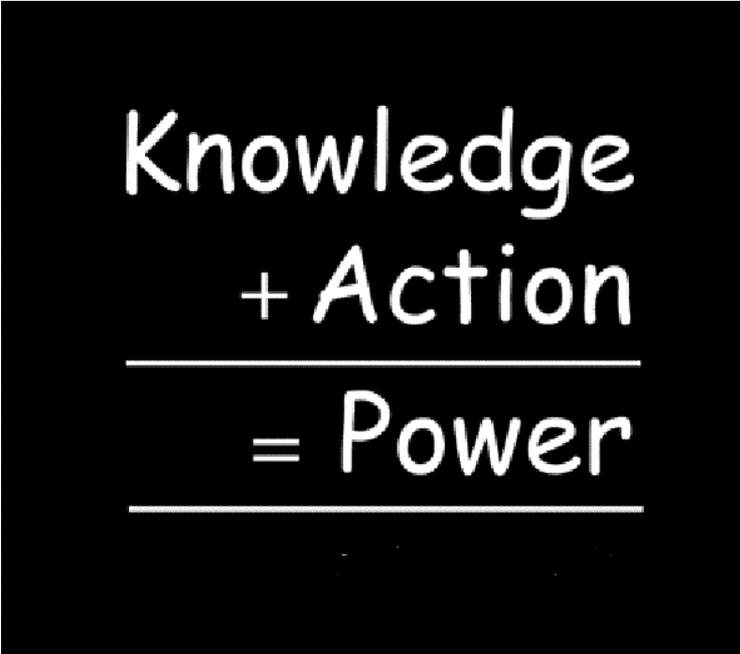
Create an Analytical Chart Report
Incident: Regional Analytical, State Analytical

**It's not what you can do for the registry;
it's what the registry can do for you!**



Conclusion

- o Data drives action
- o Data helps prove what works...and what doesn't
- o Data helps explain programs, work, and services
- o Data is powerful! Use it wisely!



Knowledge
+ Action

= Power

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Questions

